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6   # APPARATUS FOR MODELING IC SUBSTRATE NOISE UTILIZING IMPROVED DOPING PROFILE ACCESS KEY

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9   ## ABSTRACT OF THE DISCLOSURE

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11   A method for modeling a substrate, which includes obtaining vertically

12   discretized doping profiles in the substrate to facilitate modeling. The method

13   includes employing substrate region names and substrate cross-section names as

14   access keys to permit accessing of the vertically discretized doping profiles. The use

15   of the combination of region names and substrate cross-section names as unique

16   access keys simplifies access to doping profile information for modeling purposes and

17   yields valuable information pertaining to the presence of p-type to n-type material

18   transitions. The information pertaining to transitions may be employed to improve

19   substrate modeling accuracy through the inclusion of junction capacitances with the

20   modeling process.